

LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A method for filling deepened portions of a sample carrier with chemical and/or biological liquids comprising:

positioning a liquid dispensing device above a first deepened portion, the liquid dispensing device comprising a liquid chamber which, for generating the droplets, is subjected to an activating pulse provided by a pulse generator,

in a liquid dispensing step, producing at least one series of droplets, wherein in a series of droplets a plurality of droplets are dispensed into the first deepened portion, and

performing plural repetitions of the positioning step for positioning the liquid dispensing device above further deepened portions as well as of the liquid dispensing step for dispensing a plurality of droplets in at least one series of droplets into this deepened portion,

wherein a damping pulse generated by the pulse generator at the end of the series of droplets for damping the postoscillation of the liquid dispensing device.

2. (Previously presented) The method according to claim 1 wherein, at the beginning of the liquid dispensing step, a prepulse of a higher amplitude than that of the activating pulse is generated by the pulse generator prior to the first activating pulse.

3. (Previously presented) A method for filling deepened portions of a sample carrier with chemical and/or biological liquids comprising:

positioning a liquid dispensing device above a first deepened portion, the liquid dispensing device comprising a liquid chamber which, for generating the droplets, is subjected to an activating pulse provided by a pulse generator,

in a liquid dispensing step, producing at least one series of droplets, wherein in a series of droplets a plurality of droplets are dispensed into the first deepened portion, and

performing plural repetitions of the positioning step for positioning the liquid dispensing device above further deepened portions as well as of the liquid dispensing step for dispensing a plurality of droplets in at least one series of droplets into this deepened portion,

wherein a prepulse generated by the pulse generator at the start of the series of droplets and transmitted prior to the first activating pulse, the amplitude of the prepulse being larger than that of the activating pulse.

4. (Previously presented) The method according to claim 3 wherein, at the end of the liquid dispensing step, a damping pulse is generated by the pulse generator for damping the postoscillation of the liquid dispensing device.

5. (Previously presented) The method according to claim 1 wherein, in operation at resonant frequency, the damping pulse is generated by phase reversal of the activating pulse.

6. (Previously presented) The method according to claim 1 wherein the damping pulse is generated substantially after the dispensing of the last droplet dispensed for filling.

7. (Previously presented) The method according to claim 1 wherein the damping pulse substantially counteracts the preset oscillation of the liquid dispensing device.

8. (Previously presented) The method according to claim 1 wherein the amplitude of the damping pulse is at least 20% of the amplitude of the activating pulse.

9. (Previously presented) The method according to claim 1 wherein the duration of the damping pulse is longer than the duration of the activating pulse.

10. (Previously presented) The method according to claim 2 wherein the amplitude of the prepulse is at least 20% larger than of the amplitude of the activating pulse.

11. (Previously presented) The method according to claim 2 wherein the prepulse causes the first droplet to be dispensed.

12. (Previously presented) The method according to claim 1 wherein, for filling the deepened portion, at least 5 droplets are dispensed.

13. (Previously presented) The method according to claim 1 wherein the liquid dispensing device is operated at resonant frequency.

14. (Previously presented) The method according to claim 1 wherein the dispensing of liquid is performed via a capillary chamber provided in the liquid dispensing device and connected to the liquid chamber.

15. (New) A method for filling deepened portions of a sample carrier with chemical and/or biological liquids comprising:

positioning a liquid dispensing device with respect to a first deepened portion of the sample carrier so that a discharge opening of the liquid dispensing device is above the first deepened portion;

activating a pulse generator of the liquid dispensing device to generate an activating pulse, the activating pulse being configured to dispense a series of droplets from a liquid chamber of the liquid dispensing device into the first deepened portion; and

activating the pulse generator to generate a damping pulse at an end of the series of droplets for damping a postoscillation of the liquid dispensing device.

16. (New) The method according to claim 15, further comprising activating the pulse generator to generate a prepulse prior to the activating pulse, the prepulse having an amplitude that is higher than an amplitude of the activating pulse.

17. (New) The method according to claim 15 wherein the damping pulse comprises an amplitude that is at least 20% of an amplitude of the activating pulse.

18. (New) The method according to claim 15 wherein the damping pulse has a duration that is longer than a duration of the activating pulse.

19. (New) The method according to claim 16 wherein the amplitude of the prepulse is at least 20% larger than the amplitude of the activating pulse.